

Anti-C/EBP beta Antibody

Rabbit polyclonal antibody to C/EBP beta Catalog # AP59512

Specification

Anti-C/EBP beta Antibody - Product Information

Application Primary Accession Reactivity Host Clonality Calculated MW WB, IHC <u>P17676</u> Human, Bovine, Dog Rabbit Polyclonal 36106

Anti-C/EBP beta Antibody - Additional Information

Gene ID 1051

Other Names TCF5; CCAAT/enhancer-binding protein beta; C/EBP beta; Liver activator protein; LAP; Liver-enriched inhibitory protein; LIP; Nuclear factor NF-IL6; Transcription factor 5; TCF-5

Target/Specificity Recognizes endogenous levels of C/EBP beta protein.

Dilution WB~~WB (1/500 - 1/1000), IH (1/100 - 1/200) IHC~~1:100~500

Format Liquid in 0.42% Potassium phosphate, 0.87% Sodium chloride, pH 7.3, 30% glycerol, and 0.09% (W/V) sodium azide.

Storage Store at -20 °C.Stable for 12 months from date of receipt

Anti-C/EBP beta Antibody - Protein Information

Name CEBPB (HGNC:1834)

Synonyms TCF5

Function

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Important transcription factor regulating the expression of genes involved in immune and inflammatory responses (PubMed:<a href="http://www.uniprot.org/citations/12048245" target="_blank">12048245</a>, PubMed:<a href="http://www.uniprot.org/citations/1741402" target="_blank">1741402</a>, PubMed:<a href="http://www.uniprot.org/citations/18647749" target="_blank">18647749</a>, PubMed:<a href="http://www.uniprot.org/citations/9374525" target="_blank">9374525</a>). Also plays a significant role in adipogenesis, as well as in the
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gluconeogenic pathway, liver regeneration, and hematopoiesis. The consensus recognition site is 5'-T[TG]NNGNAA[TG]-3'. Its functional capacity is governed by protein interactions and post-translational protein modifications. During early embryogenesis, plays essential and redundant roles with CEBPA. Has a promitotic effect on many cell types such as hepatocytes and adipocytes but has an antiproliferative effect on T-cells by repressing MYC expression, facilitating differentiation along the T-helper 2 lineage. Binds to regulatory regions of several acute-phase and cytokines genes and plays a role in the regulation of acute-phase reaction and inflammation. Also plays a role in intracellular bacteria killing (By similarity). During adipogenesis, is rapidly expressed and, after activation by phosphorylation, induces CEBPA and PPARG, which turn on the series of adipocyte genes that give rise to the adipocyte phenotype. The delayed transactivation of the CEBPA and PPARG genes by CEBPB appears necessary to allow mitotic clonal expansion and thereby progression of terminal differentiation (PubMed:20829347). Essential for female reproduction because of a critical role in ovarian follicle development (By similarity). Restricts osteoclastogenesis: together with NFE2L1; represses expression of DSPP during odontoblast differentiation (By similarity).

Cellular Location

Nucleus. Cytoplasm. Note=Translocates to the nucleus when phosphorylated at Ser-288. In T-cells when sumoylated drawn to pericentric heterochromatin thereby allowing proliferation (By similarity). {ECO:0000250|UniProtKB:P28033, ECO:0000269|PubMed:9374525}

Tissue Location Expressed at low levels in the lung, kidney and spleen

Anti-C/EBP beta Antibody - Protocols

Provided below are standard protocols that you may find useful for product applications.

- <u>Western Blot</u>
- <u>Blocking Peptides</u>
- Dot Blot
- Immunohistochemistry
- Immunofluorescence
- Immunoprecipitation
- Flow Cytomety
- <u>Cell Culture</u>

Anti-C/EBP beta Antibody - Images





Western blot analysis of C/EBP beta expression in EC9706 (A), A549 (B) whole cell lysates.



Immunohistochemical analysis of C/EBP beta staining in human lung cancer formalin fixed paraffin embedded tissue section. The section was pre-treated using heat mediated antigen retrieval with sodium citrate buffer (pH 6.0). The section was then incubated with the antibody at room temperature and detected using an HRP conjugated compact polymer system. DAB was used as the chromogen. The section was then counterstained with haematoxylin and mounted with DPX.

Anti-C/EBP beta Antibody - Background

KLH-conjugated synthetic peptide encompassing a sequence within the C-term region of human C/EBP beta. The exact sequence is proprietary.